WHERE DO BIRDS SPEND THE NIGHT?

BY LAURENCE M. HUEY

The interrogative form of the above title is intentional. Certainly the writer would not undertake to answer the question, and probably there are but few ornithologists who could state with certainty where many kinds of birds spend the night. To be sure, there are published references to such sleeping haunts as the chosen "roosts" of crows, the chimneys into which migrating swifts pour at sundown, the marshes where hordes of tree swallows congregate when the day is closing, and similar conspicuous night retreats of certain birds. But the individual small birds—where are their sleeping places? This is a question that naturally arises in the mind, when, for instance, one sees the same individual song sparrow on the feeding table morning after morning, but not no clue as to where it has been hiding during the hours of darkness. It must have been in some safe place, for danger stalks our feathered friends by night as well as by day, a danger that has been intensified through the man-caused introduction of the house cat, with its consequences beyond control.

This problem of all diurnal birds, during the period when they are mentally inactive or, if awakened, cannot see to escape, has been a subject of especial interest to the writer. During fifteen years of field work he has kept particular watch for the roosting places of birds, yet few have been the opportunities to find birds asleep. Perhaps some of his observations, all made in the far southwest, when added to what others have written, may throw a little more light on this little-known subject.

For some birds the answer is easy. We know that woodpeckers sleep in their holes in trees or large cactuses—not of their own construction, perhaps, but woodpecker holes, nevertheless. Migrating flickers resort at times to old buildings, where they chisel holes through the walls beneath the eaves and get into the attics. On the western deserts, Verdins and Cactus Wrens keep their nests in repair, that they may there spend their nights in comfort and out of sight or reach of their nocturnal enemies, whether fox or owl.

The quail of California roost in trees, where they can find safety amid a dense cluster of twigs—sometimes several birds in close company, if the weather is cold. But quail once offered the writer a problem when he was collecting in the treeless region of central Lower California, Mexico, and found these birds fairly swarming. Coyotes and other carnivores were abundant, horned owls were present, yet

quail thrived. Where could they spend the night in safety? For days the writer pondered and suddenly the answer was found. The cactus with its myriads of needle-like spines kept guard over the quail during the night. Nor did they perch on the branches—the thorns would not permit—but, by resting on the ground in dense cactus thickets, they were safe from all harm. In one place, an area at least ten feet square, near the center of a large patch of cactus, was used as a roosting place by a large covey of quail and here fecal matter to the depth of four inches had been deposited. Thus was explained the fact that, in numerous cactus thickets, the entire center was found to be dead, dying, or entirely missing—the result of too much manure. now decayed and indiscernible, for the growth to withstand.

Once, when the writer was encamped in an oak-filled canyon near Escondido, San Diego County. California, for several weeks during the late fall, a Plain Titmouse came nightly to roost in an oak tree, within a few feet of the tent's door. The perch selected, which was the same every night, was a small twig less than six inches in length that grew directly beneath and paralleled a huge horizontal limb at least sixteen inches in diameter. This twig held a dozen luxuriant leaves and formed both a screen and a wind-break for the sleeping bird. So fixed was the titmouse's choice of this particular roost that the presence of chattering humans with a bright light and campfire mattered not at all.

Recently the writer spent a fortnight about ten miles southeast of Alamo, in the mountains of northern Lower California, Mexico. His camp was established near an old adobe ruin, where, after a few days, a Say's Phoebe was noticed early in the morning and again at sunset, with precise regularity. This occasioned some speculation, and not until it was discovered that the bird had a chosen roosting site nearby, were its actions explained. It happened that the adobe house still retained a partial roof and the writer, having numerous skins and skulls of large animals in the course of drying, had improvised a rack under the shelter of the roof. On the evening when the phoebe's secret was discovered, an inspection tour was made about 10:30 to see to the safety of the specimens. Before entering the doorless doorway of the old building, a chance glauce upward revealed, almost directly over the doorway, an old nest of a Black Phoebc and, protruding from the edge of the nest was a bird's tail. A closer look showed the preemptor to be none other than the regular-twice-dailyoccurring Say's Phoebe. Blinded by the light, the bird did not flush. but tried to crouch more closely into the cup of the nest.

Every night thereafter the phoebe was looked for and always found. On two occasions, when the weather had turned decidedly cooler, the bird resorted to a niche in the wall a few inches above the nest; otherwise it was always in its favorite spot. Its habit of shyness when evening came was interesting; for the phoebe would never venture near the roost if any moving thing, whether horse or man, were visible within a hundred feet.

It is customary to think of protective coloration as applying only during daylight hours. Such, however, is not the case, for on occasions too numerous to recall the writer has attempted to find wild birds on their roosts by the aid of bright electric torches or gasoline lanterns, but never with success. This has been in spite of unusual opportunities for such a search, occasioned by the necessary inspection at night of long lines of mouse-traps set in the varying conditions of mountain, marsh and desert. And so the question of where birds spend the night will continue to run, answered only bit by bit, although each new answer will be interwoven with some tale of interest.

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NOTES ON THE RAILS

BY E. D. NAUMAN

These most peculiar and shy birds are so rare in this part of the state (Sigourney, Iowa), that during a period of fifteen years of careful observation of all our birds, only eight individuals belonging to four species of rails have come under my observation. So far as I know none of them breed here. If they do, I have never been fortunate enough to discover a nest.

The larger marshes and ponds in this vicinity have mostly been drained long ago and converted into cultivated fields. Consequently few nesting sites suitable for rails remain. Migratory birds as a rule return each summer to the locality where they were reared. It is also a fact that the life of most of our smaller birds is rather short. These facts account for the great scarcity or total absence of birds from localities where their nesting sites have all been destroyed.

Following is a list of the rails which it has been my opportunity to observe and an account of the circumstances under which they were seen.

On May 5, 1914, I was walking through a damp and marshy meadow when one of the little Black Rails raised up in front of my